

REMARKS

The present invention relates to an isocyanate-reactive component useful for the production of a rigid closed cell polyurethane foam by a RIM process. The isocyanate-reactive component of the present invention includes from 0.5 to 30% by weight of a polyol based on vegetable oil, fish oil or oil derived from animal fat, from 5 to 80% by weight of another isocyanate-reactive material having a functionality of at least 1 and a number average molecular weight of from 400 to 10,000, a chain extender, a blowing agent and a catalyst.

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kurth (U.S. 6,180,686). Applicant continues to traverse this rejection.

In its decision of September 30, 2004, the Board of Appeals held that Applicants' Claims 1-7 were *prima facie* obvious in view of the teachings of Kurth (U.S. Patent 6,180,686) in the absence of objective evidence of unexpected results.

In response, Applicant submitted a Declaration under 37 C.F.R. 1.132 ("Clatty Declaration") in which such objective evidence is presented. The Clatty Declaration reports and discusses the results of experiments conducted with varying amounts of vegetable-based polyol.

The data and Exhibits presented in Ms. Clatty's Declaration clearly show that use of a bio-based polyol in the amounts required by Applicant's claims produces rigid polyurethanes having both a higher Flex Modulus and a higher Heat Distortion Temperature than polyurethanes made with those same polyols in amounts greater than 30% (i.e., amounts outside the range required by Applicant's claims).

This combination of properties is neither taught nor suggested by the Kurth disclosure.

The Examiner has criticized the Clatty Declaration on the basis that the showings are "not commensurate in scope with the scope of the claimed invention".

Applicant respectfully disagrees.

Applicant's claims require from 0.5 to 30 wt.% of a polyol based on vegetable oil, fish oil or oil derived from animal fat. The Clatty Declaration demonstrates isocyanate-reactive components in which 1, 4, 8, 13, 21, and 30 wt.% is such a bio-based polyol, specifically, a soy-based polyol of the type disclosed by Kurth.

Comparative showings in which isocyanate-reactive components containing 0 and 38 wt.% of that same bio-based polyol are also presented. The data presented in the Clatty Declaration are therefore commensurate in scope with the claimed invention.

Applicant therefore continues to maintain that her invention as claimed in Claims 1-7 is not rendered obvious by the teachings of Kurth.

Withdrawal of this rejection is therefore requested.


Claims 1-7 further stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-10 of U.S. Patent No. 6,649,667. Applicant respectfully traverses this rejection.

U.S. Patent 6,649,667 is a divisional application of the present application containing the claims withdrawn from this application by the Patent Office pursuant to a restriction requirement under 35 U.S.C. 121.

In view of the Patent Office's previous determination that the claims which now appear in U.S. Patent 6,649,667 were directed to an invention distinct from that being claimed in the present case, withdrawal of this rejection is requested.

In view of the above remarks, reconsideration and allowance of Claims 1-7 are respectfully requested.

Respectfully submitted,

By 
Lyndanne M. Whalen
Attorney for Applicant
Reg. No. 29,457

Bayer MaterialScience LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3843
FACSIMILE PHONE NUMBER:
(412) 777-3902
s:\shared\jmf\LMW6418.rsp